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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/892,611  | 06/28/2001  | Hemant M. Chaskar    | 05288.00010         | 4861             |
| 22907   | 7590        | 04/07/2005           | EXAMINER            |                  |
| BANNER & WITCOFF<br>1001 G STREET N W<br>SUITE 1100<br>WASHINGTON, DC 20001 |             |                      | BLAIR, DOUGLAS B    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2142                |                  |

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/892,611 | <b>Applicant(s)</b><br>CHASKAR ET AL. |  |
|                              | <b>Examiner</b><br>Douglas B Blair   | <b>Art Unit</b><br>2142               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/28/01 &amp; 6/15/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1-9 and 46-51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/20/2004.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,654,359 to La Porta et al. in view of U.S. Patent Number 6,360,264 to Rom.
4. As to claim 10, La Porta teaches a method of facilitating a mobile Internet Protocol (IP) handoff from a source access router to one of a plurality of potential target access routers, the method comprising the steps of: detecting entry into an area served by two or more of the plurality of potential target access routers (col. 14, line 39-col. 16, line 8); and transmitting an address of the source access router from the mobile terminal to one or more of the potential target access routers (col. 14, line 39-col. 16, line 8); however La Porta does not explicitly teach performing an IP handoff operation from the source access router to one of the plurality of potential target access routers on the basis of capability information received from one or more of the plurality of potential target access routers.

Rom teaches performing an IP handoff operation from the source access router to one of the plurality of potential target access routers on the basis of capability information received from one or more of the plurality of potential target access routers (col. 4, lines 4-23).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of La Porta regarding the handoff of a device with the teachings of Rom regarding picking an access point based on capabilities because such a choice ensures better quality of services for an access point user (Rom, col. 4, lines 4-23).

5. As to claim 11, Rom teaches the method of claim 10, wherein step (3) is performed in the mobile terminal by selecting a target access router on the basis of bandwidth capabilities required by the mobile terminal (col. 4, lines 4-23).

6. As to claim 12, La Porta the method of claim 10, wherein step (3) is performed by the source access router on the basis of capability information received by the source access router from the one or more plurality of potential target access routers (col. 14, line 39-col. 16, line 8).

7. As to claim 13, Rom teaches the method of claim 10, wherein step (3) comprises the step of performing the IP handoff to one of the plurality of potential target access routers that best matches capabilities required by the mobile terminal (col. 4, lines 4-23).

8. As to claim 14, La Porta teaches the method of claim 10, wherein step (3) is performed independently of any voice-channel handoff operation that is also supported by the mobile terminal (col. 14, line 39-col. 16, line 8).

9. As to claim 15, La Porta method for making handoff decisions among access routers, comprising the steps of: detecting a condition that a mobile terminal presently served by a first access router is entering an area served by a second access router (col. 14, line 39-col. 16, line 8);

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transmitting a network address of the first access router from the mobile terminal to the second access router (col. 14, line 39-col. 16, line 8); however La Porta does not explicitly teach exchanging capability information between the first access router and the second access router, such that each access router learns capabilities of the other access router.

Rom teaches exchanging capability information between the first access router and the second access router, such that each access router learns capabilities of the other access router (col. 4, lines 4-23).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of La Porta regarding the handoff of a device with the teachings of Rom regarding exchanging capability information because exchanging information ensures better quality of services for an access point user (Rom, col. 4, lines 4-23).

10. As to claim 16, Rom teaches the method of claim 15, further comprising the step of: (4) using the exchanged capability information from step (3) to make a handoff decision for a mobile IP terminal (col. 4, lines 4-23).

11. As to claim 17, La Porta teaches the method of claim 15, wherein step (3) is performed by transmitting an IP packet from the second access router to the first access router requesting capability information and receiving an IP packet from the first access router containing capability information describing capabilities of the first access router (col. 14, line 39-col. 16, line 8).

12. As to claim 18, Rom teaches the method of claim 15, wherein the capability information comprises a bandwidth supported by one of the routers (col. 4, lines 4-23).

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13. As to claim 19, Rom teaches the method of claim 15, wherein the capability information comprises dynamic loading conditions associated with one of the routers (col. 4, lines 4-23).

14. As to claim 20, Rom teaches the method of claim 15, wherein the capability information comprises security schemes supported by one of the routers (col. 4, lines 4-23).

15. As to claim 21, La Porta teaches the method of claim 15, wherein the capability information comprises the geographic location of one of the access routers (col. 14, line 39-col. 16, line 8).

16. As to claim 22, La Porta teaches the method of claim 15, wherein the capability information comprises signal transmission technologies supported by a base station associated with one of the access routers (col. 14, line 39-col. 16, line 8).

17. As to claim 23, Rom teaches the method of claim 15, wherein the capability information comprises a cost of access using one of the access routers (col. 4, lines 4-23).

18. As to claim 24, Rom teaches the method of claim 15, wherein step (1) comprises the step of detecting a condition that the mobile terminal is entering an area served by at least two potential target access routers, wherein step (3) comprises the step of exchanging information concerning both of the at least two potential target access routers (col. 4, lines 4-23); and further including the step of selecting one of at least two potential target access routers on the basis of the capability information exchanged in step 3 (col. 4, lines 4-23).

19. As to claim 25, La Porta teaches the method of claim 15, further comprising the step of: purging capability information of the first access router if no handoffs from the first access router have been detected within a predetermined time period (col. 14, line 39-col. 16, line 8).

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20. As to claim 26, La Porta teaches the method of claim 16, wherein step (4) comprises the step of selecting an optimum target router on the basis of a predetermined policy (col. 14, line 39-col. 16, line 8).

21. As to claim 27, Rom teaches the method of claim 26, wherein the policy specifies that a lowest cost access router should be selected (col. 4, lines 4-23).

22. As to claim 28, Rom teaches the method of claim 15, further comprising the step of: redirecting one or more mobile terminals away from a loaded access router to a less loaded access router on the basis of capability information obtained as a result of step (3) (col. 4, lines 4-23).

23. As to claim 29, Rom teaches the method of claim 15, wherein step (1) comprises the step of detecting that the mobile terminal is entering an area served by at least two potential target access routers, and further comprising the step of: selecting one of the two potential target access routers on the basis of a best match between a capability dictated by an application program executing on the mobile terminal and the capabilities of the two potential target access routers (col. 4, lines 4-23).

24. As to claims 30-34, they feature limitations found in claims 15-29 and are rejected for the same reasons as claims 15-29.

25. As to claims 35-38, they feature limitations found in claims 15-29 and are rejected for the same reasons as claims 15-29.

26. As to claims 39-45, they feature limitations found in claims 15-29 and are rejected for the same reasons as claims 15-29.

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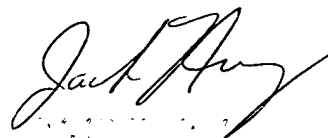
***Conclusion***

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 571-272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair  


  
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SUPERVISOR